

CASSETTE CAR STEREO  
WITH ELECTRONIC TUNER

RADIO-CASSETTE STEREO  
POUR VOITURE AVEC  
SYNTONISEUR ELECTRONIQUE

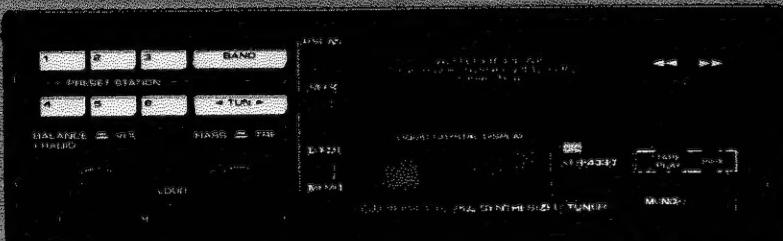
# OWNER'S MANUAL MODE D'EMPLOI

Thank you for purchasing this PIONEER product. Before attempting operation, be sure to read this manual.

Nous vous remercions d'avoir acheté cet appareil PIONEER.  
Avant de l'utiliser, prendre soin de lire ce manuel.

Grazie per aver acquistato questo prodotto PIONEER. Leggere attentamente queste istruzioni prima di usare questa unità.

Muchas gracias por la adquisición de esta producto PIONEER.  
Antes de tratar de operarlo, leer atentamente este manual.



KBH-4000

 **PIONEER**

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# Features

- **Electronic Tuner**

Frequency allocation differs depending upon the area. This unit has been designed in accordance with the frequency allocations for Europe, Asia, the Middle and Near East, Africa, Australia and Oceania. Use in other areas will result in improper reception.

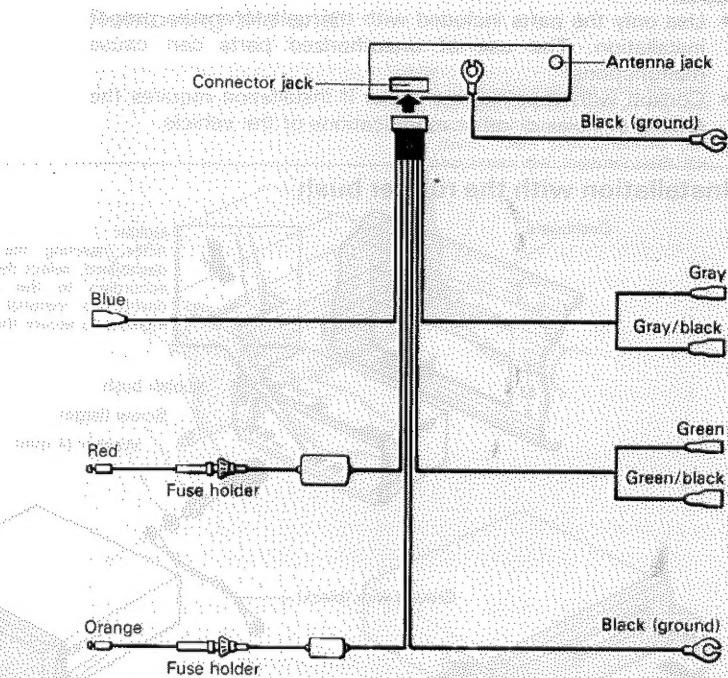
- High-power 20 W + 20 W and BPTL system gives you sound with power to spare.
- Built-in highly sensitive "Automatic Reception Control" (ARC) for automatic control of stereo separation, muting, and frequency characteristics to match the strength of the FM signal.
- Seek tuning for automatic tuning to the next higher or lower broadcast on the band.
- Preset scan tuning for sequential recall of preset frequencies.
- Preset tuning function for frequency selection at the touch of a button.
- Auto-replay function automatically restarts playback from the beginning of the tape after rewind.
- Cassette automatically ejected when the end of the tape is reached.
- Automatic Tape Slack Canceller (ATSC) tightens loosely wound tapes automatically when they are inserted.

# Connections

## Note:

- To avoid shorts in the electrical system, be sure to disconnect the battery  $\ominus$  cable before beginning installation.
- Replace fuses only with the types stipulated on the fuse holder.
- Be sure to properly connect the color coded leads. Failure to do so can cause malfunctions.
- Since a unique BPTL circuit is employed, never wire so the speaker leads are directly grounded or the left and right speaker  $\ominus$  leads are common.
- Speakers connected to this unit must be high-power type possessing maximum input of at least 20 W and impedance of 4 to 8 ohms. Connecting speakers with output and/or impedance values other than those noted here can damage the speakers.

<b>Blue</b>	To auto-antenna power terminal (Max. 300 mA 12 V DC).
<b>Red</b>	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
<b>Orange</b>	To terminal always supplied with power regardless of ignition switch position.
<b>Black (ground)</b>	To vehicle (metal) body.
<b>Gray</b>	To right speaker $\oplus$ terminal.
<b>Gray/black</b>	To right speaker $\ominus$ terminal.
<b>Green</b>	To left speaker $\oplus$ terminal.
<b>Green/black</b>	To left speaker $\ominus$ terminal.



Caution  
Never connect the speaker leads to the vehicle body or ground. Doing so may damage the speakers and the unit.

# Installation

## Note:

- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.

- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance. (Fig. 1)

## Installation with the rubber bush

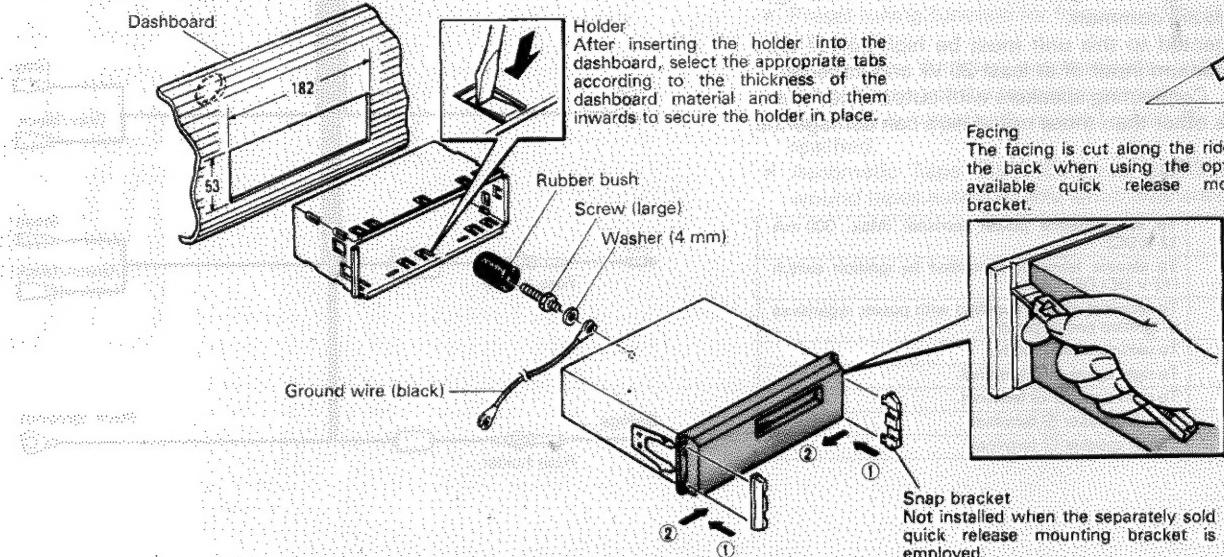
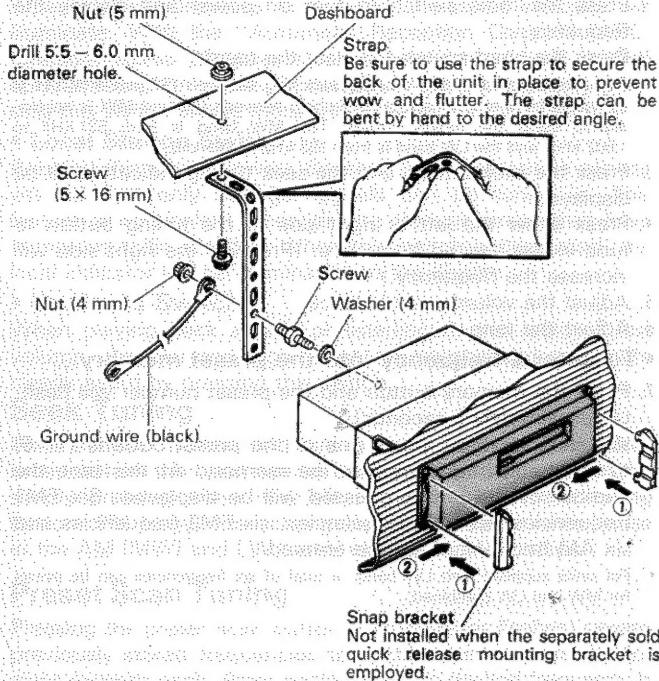
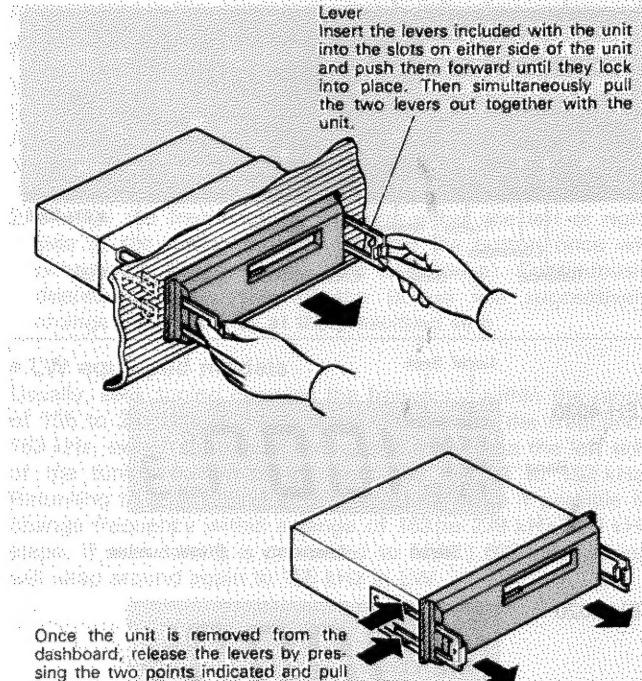


Fig. 1

## Installation without the rubber bush

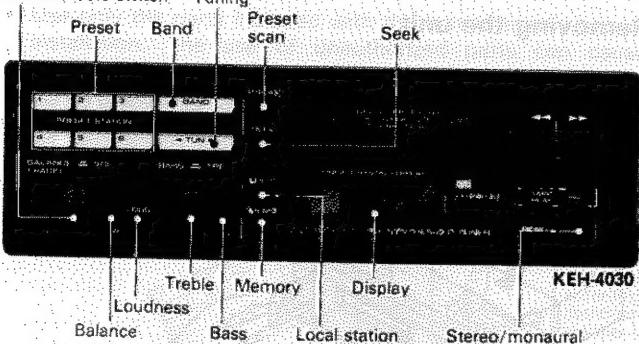


## Removing the unit



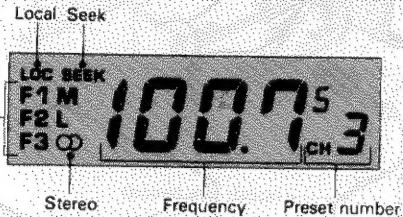
# Using the Radio

Volume/radio switch Tuning



KEH-4030

KEH-4030



KEH-4020



## • Before attempting operation...

- Reduce the volume by turning the volume control knob to the left.
- 1. Press the radio switch to turn on power and display the frequency.
- 2. Press the band switch to select the band.
- For units supplied with LW band, switching between FM and MW/LW is controlled by the band switch. Switching between LW and MW is accomplished using the tuning button. The MW band is from 531 kHz to 1,602 kHz, and the LW band is from 153 kHz to 281 kHz.
- 3. Press the seek button and the seek tuning indicator will be displayed.
- 4. Press either the left or right side of the tuning button to tune in the desired frequency. (Pressing the right side will increase the frequency.)
- 5. Adjust the volume and balance.
- 6. Adjust the tone.

## • To enter a frequency into the preset memory...

- 7. Press the memory button and the preset number will flash. (Approximately 5 seconds)
- Within 5 seconds, press one of the preset buttons (1–6) to enter the frequency into the memory. At this time the number of the button pressed will be displayed. Six FM1 frequencies, six FM2 frequencies, six FM3 frequencies and six AM frequencies can be entered.
- For units supplied with LW band, a total of six frequencies can be preset for MW and LW combined.

# Care and Maintenance

## • Stereo/Monaural Switch

This switch is used to change from stereo to monaural for FM broadcasts, and is usually left in the stereo position. When a stereo broadcast is received, the stereo indicator will illuminate. With the "Automatic Reception Control" (ARC) function, stereo broadcasts can always be enjoyed in their optimal reception mode. If excessive noise is present, pressing this switch allows monaural reception of the broadcast.

## • Local Station Switch

Pressing this switch lowers the seek tuning reception sensitivity so that only stronger signals can be tuned in. This feature is convenient when driving through areas that have numerous radio stations. When this switch is depressed, the local indicator will be illuminated on the display.

## • Loudness Switch

When playing back a tape or listening to the radio at low volume, the low and high tones are emphasized and more clearly heard by pressing this switch.

## Seek Tuning

Press the seek button, and tuning to the next higher or lower broadcast on the band can be accomplished automatically by simply pressing either the left or right side of the tuning button. FM frequencies change in 50 kHz steps while those in the AM (MW) and LW bands change in 9 kHz steps.

## Preset Scan Tuning

Pressing the preset scan button (CH indicator flashes) causes previously stored frequencies to be tuned in sequentially for eight seconds each. Press again when the desired frequency is tuned in to cancel preset scan tuning.

## Preset Tuning

Pressing the preset button instantly tunes in the frequency programmed in the memory for that button.

## Manual Tuning

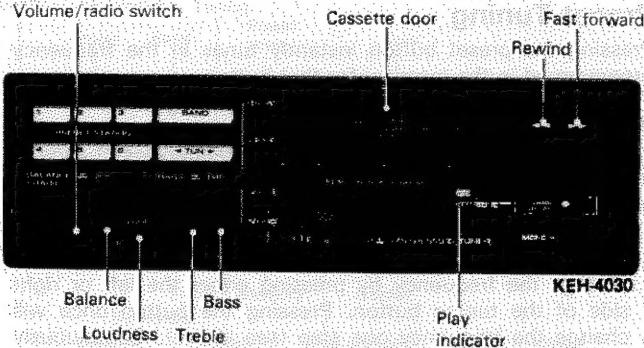
When manual tuning is employed, FM frequencies change in 50 kHz steps, LW frequencies change in 1 kHz steps, and AM (MW) frequencies change in 9 kHz steps.

1. Press the seek button and the seek tuning indicator will disappear from the display.
2. Change the frequency by pressing either the left or right side of the tuning button. Pressing the button once will change the frequency one step (see above). Continuously depressing either side of the button will successively change the frequency at the prescribed step.

## • LW equipped models

Usually, seek tuning changes the frequency within the range of 155 to 281 kHz in 9 kHz steps. To tune in the frequency 153 kHz, switch to manual tuning and then press the left side of the tuning button to go from 155 to 154 to 153 kHz. Returning to seek tuning at this point will make it possible to change frequency within a range of 153 to 279 kHz in 9 kHz steps. If seek tuning is continued to MW 1,602 kHz, tuning will wrap around again to 155 kHz in LW.

# Using the Tape Deck



## • Before attempting operation...

- Reduce the volume by turning the volume control knob to the left.
- 1. Insert a tape into the deck to turn the power on and automatically begin playback. Even if the radio is on, the unit will automatically switch to and begin tape playback.
- 2. Adjust the volume and balance.
- 3. Adjust the tone.
- 4. When playback reaches the end of the tape, the cassette will automatically be ejected from the unit (Auto-eject). To eject the tape during playback, simultaneously press the fast forward and rewind buttons.
- Be sure to eject the tape when the vehicle's ignition is turned OFF. Leaving the tape in the unit can deform the pinch roller causing wow and flutter during tape playback.

## • Fast Forward/Rewind

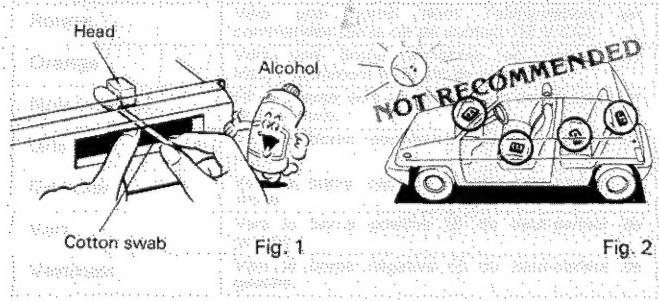
Press the fast forward button to advance the tape at high speed and the rewind button for high speed return. When fast forward is used, the auto-eject function will automatically eject the cassette from the unit when the end of the tape is reached. With rewind, the tape will start to playback automatically when the beginning of the tape is reached (Auto-replay). Press the button for the respective opposite function to disengage either fast forward or rewind.

# Care and Maintenance

- Do not use tapes longer than C-90-type (90 min.) cassettes. Longer tapes can interfere with tape transport.
- If the playback head becomes dirty, sound quality will suffer. Periodically (once or twice a month) clean the heads with a cotton swab soaked with alcohol. (Fig. 1)
- Storing cassettes in areas directly exposed to sunlight or high temperatures can distort them and subsequently interfere with tape transport. (Fig. 2)
- Store unused tapes in a tape case where there is no danger of them becoming loose or being exposed to dust.
- If the car's battery is disconnected for any reason the preset memory will be erased and must be reprogrammed after reconnection of the battery.

## After Service

In the event this unit does not function properly, contact your dealer or the nearest authorized PIONEER Service Center.

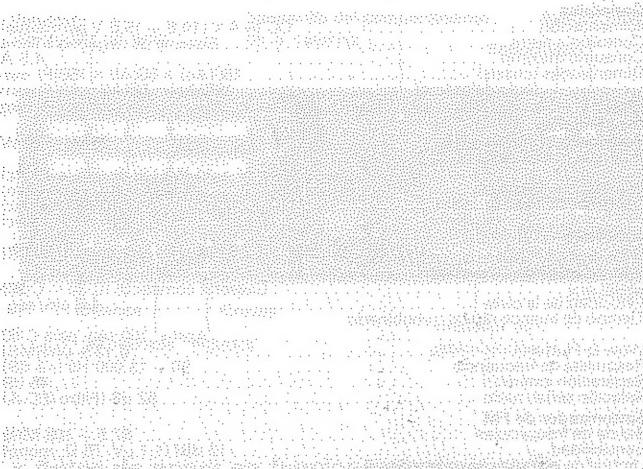


# Specifications

<b>General</b>	14.4 V DC (10.8 – 15.6 V allowable)
Power source	Negative type
Grounding system	4.5 A
Max. current consumption	180(W) × 50(H) × 150(D) mm
Dimensions (chassis)	188(W) × 58(H) × 10(D) mm
(front face)	1.4 kg
Weight	
<b>Amplifier</b>	
Maximum power output	20 W + 20 W
Continuous power output	
Load impedance	11 W + 11 W (1% dist. at 1 kHz)
Tone controls (bass)	4 Ω (4 – 8 Ω allowable)
(treble)	±10 dB (100 Hz)
Loudness contour	±10 dB (10 kHz)
	+12 dB (100 Hz), +7 dB (10 kHz) (volume: -30 dB)
<b>Tape player</b>	
Tape	Compact cassette tape (C-30 – C-90)
Tape speed	4.8 cm/sec.
Fast forward/rewind time	Approx. 100 sec. for C-60
Wow & flutter	0.13% (WRMS)
Frequency response	50 – 13,000 Hz (+3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	52 dB (IEC-A network)
<b>FM tuner</b>	
Frequency range	87.5 – 108 MHz
Usable sensitivity	12 dBf (1.1 µV/75 Ω, mono)
50 dB quieting sensitivity	17 dBf (1.9 µV/75 Ω, mono)
Signal-to-noise ratio	.70 dB (IEC-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	50 – 15,000 Hz (+3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)
<b>MW (AM) tuner</b>	
Frequency range	531 – 1,602 kHz
Usable sensitivity	18 µV (25 dB) (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)
<b>LW tuner (KEH-4030)</b>	
Frequency range	153 – 281 kHz
Usable sensitivity	30 µV (30 dB) (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)

**Note:**  
Specifications and the design are subject to possible modification without notice due to improvements.

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